

Application No. 10/737,268

Amendments to the Claims:

Listing of Claims:

1. (CANCELED)
2. (CANCELED)
3. (CANCELED)
4. (CANCELED)
5. (CANCELED)
6. (CANCELED)
7. (CANCELED)
8. (CANCELED)
9. (CANCELED)
10. (CANCELED)
11. (CANCELED)
12. (CANCELED)
13. (CANCELED)
14. (CANCELED)

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15. (CANCELED)

16. (CANCELED)

17. (CANCELED)

18. (CANCELED)

19. (CANCELED)

20. (CANCELED)

21. (CANCELED)

22. (CANCELED)

23. (CANCELED)

24. (CANCELED)

25. (CANCELED)

26. (CANCELED)

27. (CANCELED)

28. (CANCELED)

29. (CANCELED)

30. (CANCELED)

31. (CANCELED)

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32. (NEW) A process for extending the replacement life of a machine wiring harness that is electrically connecting at least one repeatedly replaced machine component to at least one electrical source within the machine,

 said wiring harness having at least first and second electrical connectors normally inter-connecting with one another, one of which has multiple male electrical contacts and the other of which has multiple female electrical contacts,

 said wiring harness connecting to said repeatedly replaced machine component with said first electrical connector and connecting to said at least one electrical source within the machine with said second electrical connector,

 wherein said second electrical connector has a limited rated number of connect and disconnect cycles, and where the expected number of connect and disconnect cycles of said second electrical connector may exceed said rated limited number of connect and disconnect cycles,

 interposing a sacrificial electrical connector that is electrically connecting between said first and second electrical connectors of said wiring harness and physically separating said first and second electrical connectors from one another,

 said interposed sacrificial connector having multiple male electrical contacts on one side thereof directly electrically connecting with respective multiple female electrical contacts on another side thereof to provide the same electrical connections for said wiring harness as said normal connection of said first and second electrical connectors of said wiring harness to one another,

 said multiple male electrical contacts on said one side of said sacrificial connector being removably connected to said multiple female electrical contacts of said wiring harness electrical connector terminals and said multiple female electrical contacts on said other side of said sacrificial connector being removably connected to said multiple male electrical

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contacts of said wiring harness electrical connector terminals, to provide the same electrical connections as said normal connection of said first and second electrical connectors,

multiply disconnecting and reconnecting said sacrificial electrical connector in multiple cycles from said first electrical connector, rather than disconnecting said first and second electrical connectors from one another, for said repeated replacement of said repeatedly replaceable machine component, to increase said rated limited number of connect and disconnect cycles and reduce replacements of said wiring harness.

33. (NEW) The process for extending the replacement life of a machine wiring harness electrically connecting at least one repeatedly replaced machine component to at least one electrical source within the machine of claim 32, further comprising tracking the number of said disconnecting and reconnecting cycles of said sacrificial electrical connector and removing said interposed sacrificial connector when a preset said number of said disconnecting and reconnecting cycles is exceeded and directly reconnecting said first and second electrical connectors to one another.

34. (NEW) The process for extending the replacement life of a machine wiring harness electrically connecting at least one repeatedly replaced machine component to at least one electrical source within the machine of claim 32, further comprising breaking off at least one portion of said sacrificial connector to reduce the number of said male and female contacts on said sacrificial connector before interposing said sacrificial connector between said first and second electrical connectors.

35. (NEW) The process for extending the replacement life of a machine wiring harness electrically connecting at least one repeatedly replaced machine component to at least one electrical source within the machine of claim 32, wherein said first electrical connector connects with said at least one replaceable machine component and wherein said

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multiply disconnecting and reconnecting of said sacrificial electrical connector in multiple cycles is restricted to multiple disconnecting and reconnecting of only one side of said sacrificial electrical connector in multiple cycles only between said sacrificial electrical connector and said second electrical connector.

36. (NEW) The process for extending the replacement life of a machine wiring harness electrically connecting at least one repeatedly replaced machine component to at least one electrical source within the machine of claim 32, wherein said first electrical connector connects with said at least one replaceable machine component and wherein said multiply disconnecting and reconnecting of said sacrificial electrical connector in multiple cycles is restricted to only one side of said sacrificial electrical connector by a locking system on said sacrificial electrical connector restricting disconnecting and reconnecting of said sacrificial electrical connector between said sacrificial electrical connector and said second electrical connector.

37. (NEW) A machine wiring harness with an extended replacement life, said machine wiring harness electrically connecting at least one repeatedly replaced machine component to at least one electrical source within the machine,

said wiring harness having at least first and second electrical connectors adapted to inter-connect with one another, one of which has multiple male electrical contacts and the other of which has multiple female electrical contacts,

said wiring harness connecting to said repeatedly replaced machine component with said first electrical connector and connecting to said at least one electrical source within the machine with said second electrical connector,

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wherein said second electrical connector has a limited rated number of connect and disconnect cycles which is less than the projected number of replacements of said at least one repeatedly replaced machine component,

said wiring harness having an additional interposed sacrificial electrical connector that is electrically connecting between said first and second electrical connectors of said wiring harness and physically separating said first and second electrical connectors from one another,

said interposed sacrificial connector having multiple male electrical contacts on one side thereof directly electrically connecting with respective multiple female electrical contacts on another side thereof to provide the same electrical connections for said wiring harness as said first and second electrical connectors of said wiring harness would otherwise provide if connected directly to one another,

said multiple male electrical contacts on said one side of said sacrificial connector being removably connected to said multiple female electrical contacts of said wiring harness electrical connector terminals and said multiple female electrical contacts on said other side of said sacrificial connector being removably connected to said multiple male electrical contacts of said wiring harness electrical connector terminals, to provide the same electrical connections therethrough,

said sacrificial connector being multiply disconnectable in multiple cycles from said first electrical connector with said repeated replacement of said repeatedly replaceable machine component, rather than disconnecting said first and second electrical connectors from one another, to increase said rated limited number of connect and disconnect cycles and reduce replacements of said wiring harness.

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38. (NEW) The machine wiring harness with an extended replacement life of claim 37, further comprising tracking means on said sacrificial electrical connector for tracking the number of said disconnecting cycles of said sacrificial electrical connector and for indicating the removal said interposed sacrificial connector when a preset said number of said disconnecting cycles is exceeded.

39. (NEW) The machine wiring harness with an extended replacement life of claim 37, wherein said sacrificial connector is frangible to selectively reduce the number of said male and female contacts on said sacrificial connector before interposing said sacrificial connector between said first and second electrical connectors.

40. (NEW) The machine wiring harness with an extended replacement life of claim 37, wherein said first electrical connector is physically and electrically connected to said replaceable machine component and wherein said sacrificial electrical connector has locking means for resisting the disconnecting of said sacrificial electrical connector from said second electrical connector of said wiring harness.